

US 6,291,009 B1

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<u>WET INGREDIENTS</u>	
Water	32% by weight of total dough

EXAMPLE 3

Ingredients, and their relative amounts, which may be used to prepare a cohesive soy-based machineable dough for producing a snack having a leavened pita-bread like appearance, flavor, and texture, are:

<u>DRY INGREDIENTS</u>	
Full-fat roasted soy flour	63% by weight of dry ingredients
Soy grits-fine mesh	8% by weight of dry ingredients
Pre-gelatinized corn starch	12% by weight of dry ingredients
Pre-gelatinized rice flour	9% by weight of dry ingredients
Potato starch	7% by weight of dry ingredients
Active dry yeast	0.2% by weight of the dry ingredients
Lecithin	0.8% by weight of dry ingredients
<u>WET INGREDIENTS</u>	
Water	35% by weight of total dough

EXAMPLE 4

Ingredients, and their relative amounts, which may be used to prepare a cohesive soy-based machineable dough for producing a snack having a leavened cracker like appearance, flavor, and texture, are:

<u>DRY INGREDIENTS</u>	
Full-fat roasted soy flour	60% by weight of dry ingredients
Soy grits	9% by weight of dry ingredients
Pre-gelatinized corn starch	12% by weight of dry ingredients
Pre-gelatinized rice flour	10% by weight of dry ingredients
Baking powder	1% by weight of the dry ingredients
Soy oil	7% by weight of the dry ingredients
Lecithin	1% by weight of dry ingredients
<u>WET INGREDIENTS</u>	
Water	33% by weight of total dough
Soy milk	2% by weight of total dough

EXAMPLE 5

Ingredients, and their relative amounts and the method, which may be used to produce a soy-based product having a tortilla-chip like appearance, flavor, and texture, are:

<u>DRY INGREDIENTS</u>	
Full-fat roasted soy flour	61% by weight of dry ingredients
Soy grits	10% by weight of dry ingredients
Pre-gelatinized Corn Starch	10% by weight of dry ingredients
Potato starch	9% by weight of dry ingredients

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Corn masa	9% by weight of dry ingredients
Lecithin	1% by weight of dry ingredients
<u>WET INGREDIENTS</u>	
Water	30% by weight of total dough

To make a tortilla-chip, the dry ingredients were measured and then mixed using a 600 lb. Peerless Paddle Mixer. Water at 120° F. was added in stages to determine the proper point of hydration, for example until about 30.3% by weight of the total dough was reached. After mixing for approximately 7 minutes, the dough was fed to a Casa Herrera single-stage sheeting machine having an 8-row cutter, and operating at a rate of 32 turns/minute. The sheeted and cut dough was conveyed through a Casa Herrera 2000 BTU radiant heat oven with temperatures maintained from about 460° F. to about 540° F. Following baking, the dough pieces were directed to a Casa Herrera fryer system having a temperature from about 350° F. to 360° F., and fried until crisp.

We claim:

1. A method of producing a soy-based product comprising:
 - preparing a dough by combining dry ingredients including a soy component and a pre-gelatinized starch with wet ingredients including water at a temperature sufficient to gelatinize the pre-gelatinized starch, wherein the soy component comprises from about 60% to about 90% by weight of the dry ingredients, the pre-gelatinized starch comprises from about 10% to about 40% by weight of the dry ingredients, and the wet ingredients comprise from about 25% to about 45% by weight of the dough;
 - sheeting the dough and cutting a dough piece from the dough; and
 - baking the dough piece.
2. The method according to claim 1 further comprising, after baking, frying the dough piece.
3. The method according to claim 1 wherein the soy component is selected from the group consisting of soy flour, soy meal, soy grits, soy chips, powdered soy protein, soy protein isolates, and mixtures thereof.
4. The method according to claim 1, wherein pre-gelatinized starch is selected from the group consisting of pre-gelatinized grain starch, pre-gelatinized tuber starch, pre-gelatinized root starch, pre-gelatinized vegetable starch, pre-gelatinized legume starch, and mixtures thereof.
5. The method according to claim 1, wherein the dry ingredients further comprise a non-soy flour selected from the group consisting of grain flour, vegetable flour, plant flour, legume flour, and mixtures thereof, comprising less than about 30% by weight of the dry ingredients.
6. The method according to claim 5, wherein the non-soy flour comprises a pre-gelatinized flour.
7. The method according to claim 1, wherein the wet ingredients further comprise a milk.
8. The method according to claim 1, wherein the wet ingredients further comprise a milk substitute.
9. The method according to claim 1, wherein the dry ingredients further comprise a flavoring substance comprising less than about 50%, by weight, of the dry ingredients.
10. The method according to claim 1, wherein the dry ingredients further comprise a leavening agent comprising less than about 5%, by weight, of the dry ingredients.

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